

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 10/031, 442
Attorney Docket No.: Q68151

REMARKS

Applicant herein amends claim 1 to include the subject matter of claim 3. Claims 2 and 3 are cancelled.

I. Claim Objections

The Examiner objected to claims 1-3 because of informalities. Applicant herein corrects the informalities and Applicant respectfully requests the Examiner to withdraw this objection to the claims 1-3.

The Examiner objected to claims 4-12 because of informalities. Previously, on January 22, 2002, Applicant filed a preliminary amendment that corrected the improper multiple dependencies. Therefore Applicant respectfully requests the Examiner to withdraw this objection to claims 4-12.

II. Specification

Applicant submits a clean and a marked-up version of the substitute specification in compliance with 37 C.F.R. § 1.125. Applicant respectfully submits that the substitute specification contains no new matter and is only for the purpose of correcting informalities.

III. Claim Rejections-35 U.S.C. § 103

The Examiner rejected claims 1 and 2 under 35 U.S.C. § 103 as being allegedly unpatentable over Kazama (US 6,511,156) in view of Kuhman (US 6,243,112). Claim 1 as herein amended requires:

said ink-repellant film is formed by plasma
polymerization of linear perfluorocarbon
mixed with carbon tetrafluoride.

As indicated in the Examiner's rejection of claim 3, Kazama in view of Kuhman does not teach the subject matter of herein amended claim 1, which now includes the requirements of claim 3.

The Examiner rejected the subject matter of herein amended claim 1 as allegedly unpatentable over Kazama in view of Kuhman and further in view of Lee (US 6,008,137). Claim 1 is patentably distinguishable over the combined references because of any one of the following:

- a) Lee is nonanalogous prior art for the purpose of analyzing the obviousness of the subject matter of claim 1,
- b) there is no motivation to combine Kazama and Kuhman with Lee, and
- c) Lee does not teach the subject matter of herein amended claim 1.

Regarding nonanalogous art, "in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). "A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

Lee is from a nonanalogous art, a different field of invention, where the particular problem to be solved is different from Applicant's problem. Lee's invention "relates to plasma etch methods for forming patterned silicon nitride layers within integrated circuits. More particularly, the present invention relates to a plasma etch method for forming a patterned silicon

nitride layer substantially free of plasma etch bias within an integrated circuit” (col. 1, lines 11-16). Lee is not reasonably pertinent to one endeavoring in Applicant’s technical field; because of the subject matter of Applicant’s technical field, one would not logically consider Lee in solving his problem.

Next, there is no motivation to combine the applied references, “the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” MPEP 2143.01. Also, “a statement that modifications of the prior art meet the claimed invention would have been well within the ordinary skill of the art at the time the claimed invention was made because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish prima facie case of obviousness without some objective reason to combine the teachings of the references.” *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993); MPEP 2143.01.

Those skilled in the art would find it physically impossible to combine Lee and the other references in the manner suggested, and the combined references do not contain any suggestion expressed or implied that they be combined in the manner suggested. In other words, those skilled in the art would not be motivated to modify the teaching for print heads of Kazama and Kuhman, to the teaching for etching integrated circuits of Lee.

Last, Lee fails to teach the subject matter of claim 1. Lee teaches a plasma etch method of patterning a silicon nitride film for an integrated circuit that uses perfluorocarbon as an etchant gas where the silicon nitride film has substantially no etch bias. (col. 4, lines 60-67; col

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5, lines 1-8). Lee teaches that “the preferred embodiment of the method of the present invention, the perfluorocarbon etchant gas is preferably carbon tetrafluoride...” (col. 7, lines 16-18).

Lee does not teach (in col. 7, lines 16-18) “ink-repellant film is formed by plasma polymerization of linear perfluorocarbon mixed with carbon tetrafluoride.” However, in Lee (col. 7, lines 16-18) the carbon tetrafluoride is named merely as a specific example of the etchant gas (perfluorocarbon) for patterning a silicon nitride film. Moreover, Lee does not mention or suggest that an “ink repellant film is formed...with carbon tetrafluoride” as claimed in the subject matter of now amended claim 1. Indeed, “to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” MPEP 2143.03.

Because Lee is nonanalogous prior art, there is no motivation to combine Kazama and Kuhman with Lee, and nevertheless, Lee does not teach the claimed feature. Applicant therefore respectfully requests the Examiner to withdraw this rejection of herein amended claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,



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